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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/008,052	11/13/2001	Melvin Levinson	58092-012 (SCVL-110)	2825

7590 09/25/2003  
McDermott, Will & Emery  
28 State Street  
Boston, MA 02109

EXAMINER

ROBERTS, PAUL A

ART UNIT	PAPER NUMBER
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3731

DATE MAILED: 09/25/2003

10

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/008,052

Applicant(s)

LEVINSON ET AL.

Examiner

Paul A Roberts

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 20 August 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-36 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 37-40 are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 March 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

### DETAILED ACTION

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-36 remain rejected under 35 U.S.C. 103(a) as being unpatentable over Economou US 3,811,438, in view of McDevitt et al. 2003/0050589, in view of De Lucca et al 4,833,238. A further explanation of this rejection is provided under the Response to Arguments heading.

1. Regarding claims 1-35, as admitted by the applicant in the specification paragraph 3, the method of applying pressure to a wound, maintaining the pressure on the wound, and removing the pressure on a wound is well known in the art. Further, said method comprising additionally applying a closure pad to the wound, maintaining the pressure on the wound via the closure pad, and then removing the closure pad is well known in the art. This procedure is followed anytime a bandage such as the one disclosed by Economou US 3,811,438 is applied to a wound. The Economou bandage is comprised of adhesive tape, a non-woven material. However, Economou does not disclose the use of glucosamines in the bandage. Chitosan can be used to produce various glucosamines such as poly-N-Acetylglucosamine and Poly-D-glucosamine '589 and '238. Glucosamines are beneficial to place in wounds. McDevitt teaches, " For instance, cationic polymers can help clean wounds because they typically have a strong attraction for negatively charged bacteria and deleterious acidic byproducts. One example of a cationic polymer that is suitable for use in the present invention is chitosan (poly-N-acetylglucosamine, a derivative of chitin) or chitosan salts. Chitosan and its salts are natural biopolymers that can have both hemostatic and bacteriostatic properties. As a result, chitosan can help reduce

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bleeding and infection.” Further McDevitt teaches that an acetate salt of the glucosamine may be created and used in the bandage by heating the salt. McDevitt states, “Chitosan salt solutions can be prepared by dissolving a desired concentration of chitosan in an aqueous solution of a desired acid. A chitosan salt solution can be dried by various methods including lyophilization, spray drying or by heating in an oven. The resulting chitosan salt can then be dissolved in water to form a chitosan solution. It is understood that a chitosan salt solution, for example chitosan acetate, does not imply a covalent attachment of chitosan to acetate, but rather comprises a solution containing the acetate salt of chitosan.” McDevitt does not disclose the use of poly-D-glucosamine. De Lucca discloses the cationic polymer, poly-D-glucosamine can be made from chitosan. De Lucca states this in col. 2, 35-65. Since poly-D-glucosamine would have the same healing properties as poly-N-acetylglucosamine it can be used interchangeably or in conjunction with poly-N-acetylglucosamine. At the time of the invention it would have been obvious to combine the glucosamines (either as an acetate salt or in solution), poly-D-Glucosamine from De Lucca, and poly-N-acetylglucosamine from McDevitt, with the bandage of Economou to improve the healing properties of the bandage, because, chitosans “help clean wounds because they typically have a strong attraction for negatively charged bacteria and deleterious acidic byproducts.”

2. Claim 36 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combined Economou device in view Lebovic US 6309369. Economou discloses all of claim 1. Economou does not disclose the length of time to maintain the bandage on the wound. Lebovic states a bandage should be continuously applied to a wound for about a day in col. 1, lines 5-25. It would have been obvious to one of ordinary skill in the art at the time the invention was made to

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apply the combined Economou US 3,811,438 to a wound for at least ten minutes because Lebovic teaches that a bandage should be changed once every 24 hours.

### ***Response to Arguments***

Applicant has two major objections to the previous office action: A) not all the limitations of the method are met by the combination, and B) the applicant contends the two disclosed forms of the glucosamine do not have the same healing properties, thus cannot be used interchangeably.

A) The applicant stated in paragraph 3, that is known that nurses may be required to apply external pressure to the incision site for an extended period of time. The glucosamine would be inherently directed to the wound when the bandage was applied to the wound. It is not necessary for the previously cited references to disclose the step of applying the pressure to collapse blood vessel because the applicant pointed out in the specification that applying pressure to a wound is a well-known step. At the time of the invention it would have been obvious to one having ordinary skill in the art to apply pressure to the blood vessel proximal to the wound and apply glucosamine to the wound as taught by Economou '438 in view of McDevitt et al. '589 and in view of Lucca et al. '238 because as stated in the previous action, the step of applying pressure to wound proximal the wound site is well-known in the art.

B) The fact that poly-D-glucosmine (pdg) may or may not have identical healing properties as compared to poly-N- acetylglucosamine (pna) is not relevant because they need not have identical healing properties in order for the substitution of one glucosamine for the other to be an obvious substitution. As McDevitt teaches, glucosamines, in general, are beneficial to

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place in wounds because they have a strong attraction for negatively charged bacteria. McDevitt specifically discloses pna. Since pdg is also a glucosamine it would have been logical to place pdg either in conjunction with pna or in place of pna on the bandage because it would have been expected that pdg function equally well as pna since both would attract negatively charged bacteria.

### *Conclusion*


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul A Roberts whose telephone number is (703) 305-7558. The examiner can normally be reached on 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael J Milano can be reached on 703-308-2496. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0858.

Paul Roberts  
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15/09/03



  
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